

**REMARKS**

Claims 1-13 are presented for examination. Claims 1, 4, 7, 10 and 13 are allowed. Claims 5, 6, 8, 9, 11 and 12 are found allowable subject to being rewritten in independent form.

Claim 2 has been amended to include the subject matter of claim 3. Claim 3 and claims 6, 9 and 12 dependent from claim 3 have been cancelled.

Claim 2 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Sourgen et al. in view of Kadowaki. This rejection is deemed moot in view of the amendment to claim 2.

Claim 3 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Sourgen et al. in view of Kadowaki and further in view of Reichert et al.

As indicated above, the subject matter of claim 3 has been incorporated into claim 2.

Claim 2, as amended, recites a data storage apparatus comprising a scrambling circuit for converting an input signal to a desired format, and a storage device for storing converted data. The claim specifies that the scrambling circuit is constituted by a rewritable device, and further includes:

- a plurality of conversion circuits each converting said input signal according to different rules; and
- a selector for selecting one of signals output by said plurality of conversion circuits and supplying what is selected to said storage device.

First, the rejection of the original claim 3 is respectfully traversed for the following reasons.

The original claim 3 dependent from claim 2 recites that the scrambling circuit includes:

- a plurality of conversion circuits each converting said input signal according to different rules; and
- a selector for selecting one of signals output by said plurality of conversion circuits and supplying what is selected to said storage device.

The Examiner admits that Sourgen and Kadowaki do not disclose a plurality of conversion circuits each converting said input signal according to different rules; and a selector for selecting one of signals output by said plurality of conversion circuits and supplying what is selected to said storage device

The Examiner considers the RAMs 150 and 152 of Reichert to correspond to the claimed conversion circuits converting the input signal according to different rules.

Considering the reference, Reichert discloses that the RAM 150 converts physical X address into logical X address, and the RAM 152 converts physical Y address into logical Y address. Therefore, the RAMs convert different signals. By contrast, the claim requires the same input signal to be converted according to different rules.

Moreover, the reference provides no reason to conclude that the RAMs 150 and 152 operate according to different rules.

Accordingly, Reichert does not disclose that the RAM 150 and 152 convert the same signal according to different rules, as claim 3 requires.

Hence, Reichert et al. does not disclose the arrangement recited in claim 3.

It is well settled that the test for obviousness is what the combined teachings of the references would have suggested to those having ordinary skill in the art. *Cable Electric Products, Inc. v. Genmark, Inc.*, 770 F.2d 1015, 226 USPQ 881 (Fed. Cir. 1985). In determining whether a case of *prima facie* obviousness exists, it is necessary to ascertain whether the prior art teachings appear to be sufficient to one of ordinary skill in the art to suggest making the claimed substitution or other modification. *In re Lulu*, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1984).

As demonstrated above, a combination of Sourgen et al. and Kadowaki with Reichert et al. is not sufficient to suggest the invention recited in claim 3.

Therefore, the rejection of claim 3 under 35 U.S.C. 103 is improper and should be withdrawn.

Further, in the application of a rejection under 35 U.S.C. §103, it is incumbent upon the Examiner to factually support a conclusion of obviousness. The Examiner must provide a reason why one having ordinary skill in the art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985). *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

As demonstrated below, there is no motivation for modifying the Sourgen system in view of Kadowaki.

In his rejection of claim 2, the Examiner indicates that Sourgen teaches a scrambling circuit for converting an input signal to a desired format, and a storage device for storing converted data.

Further, the Examiner admits that Sourgen does not teach that the scrambling circuit is constituted by a rewritable device. Kadowaki is relied upon for disclosing the scrambling circuit constituted by a rewritable device.

Considering the references, Sourgen discloses numerically scrambling data using permutation of data bits performed by permutation circuits DBr2 and DBr3, and writing the scrambled data to RAM and EEPROM, respectively.

Kadowaki discloses image processing apparatus 1 having data scrambling circuit 7 for scrambling image data and transmitting the scrambled data to image forming apparatus 2 having data scrambling circuit 18 with a data conversion function inversed with respect to the data conversion function of the circuit 7 in order to unscramble the image data scrambled by the circuit 7. Both data scrambling circuits 7 and 18 are controlled by controller 15 of the image forming apparatus 2.

As pointed out by the Examiner, the reference stresses that the data scrambling circuits 7 and 18 can have any configuration “as long as they can set a reversible conversion function” (col. 5, lines 11-12), i.e. **as long as image data scrambled by the scrambling circuit 7 can be unscrambled by the scrambling circuit 18.**

Moreover, Kadowaki emphasizes that any configuration of the data scrambling circuits 7 and 18 “is within the object of the present invention as far as the data scrambling circuit 7 is directly controlled by the controller 15” (col. 5, lines 8-10). Hence, **the reference expressly limits the configuration of the data scrambling circuit 7 to a configuration controllable by a controller of the image forming apparatus that receives and unscrambles the data scrambled by the data scrambling circuit 7.**

By contrast, Sourgen does not disclose a combination of scrambling and unscrambling circuits. Therefore, one skilled in the art would have no motivation to incorporate the Kadowaki data scrambling configuration that “can set a reversible conversion function” into the Sourgen system. As the Sourgen system writes the scrambled data onto the RAM or EEPROM, rather than transmits the scrambling data for unscrambling, it does not need to set “a reversible conversion function” in the scrambling circuits.

Moreover, Kadowaki expressly **teach away** from the claimed invention, thereby constituting further **evidence of nonobviousness**. *In re Bell*, 991 F.2d 781, 26 USPQ2d 1529 (Fed. Cir. 1993); *In re Hedges*, 783 F.2d 1038, 228 USPQ 685 (Fed. Cir. 1986); *In re Marshall*, 578 F.2d 301, 198 USPQ 344 (CCPA 1978).

As indicated above, Kadowaki expressly limits the configuration of the data scrambling circuit 7 to a configuration controllable by a controller of an apparatus that receives and unscrambles the data scrambled by the data scrambling circuit 7.

The data scrambling circuits of Sourgen are not controlled by such a controller. Therefore, one skilled of the art would be discouraged from using the Kadowaki configuration for the data scrambling circuits of Sourgen.

Hence, Kadowaki contains clear discouragement from combining Sourgen with Kadowaki. *Syntex (USA) LLC v. Apotex, Inc.*, Case No. 04-1252 (Fed. Cir. May 18, 2005).

Accordingly, there is no motivation for modifying Sourgen in view of Kadowaki.

Therefore, as demonstrated above, the prior art does not teach or suggest:

-a plurality of conversion circuits each converting said input signal according to different rules; and

- a selector for selecting one of signals output by said plurality of conversion circuits and supplying what is selected to said storage device.

Moreover, there is no motivation for modifying Sourgen in view of Kadowaki.

Accordingly, the subject matter of claim 2, as amended, is not obvious over Sourgen et al. in view of Kadowaki and further in view of Reichert et al.

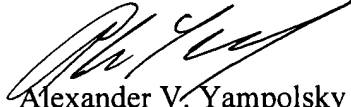
In view of the foregoing, and in summary, claims 1, 2, 4, 5, 7, 8, 10, 11 and 13 are considered to be in condition for allowance. Favorable reconsideration of this application, as amended, is respectfully requested.

**Application No.: 09/641,352**

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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